

What is claimed is:

1        1. A mobile phone antenna, comprising:  
2              a first conductive radiation element that is formed in a sheet  
3      metal conductor and resonates at a predetermined resonance  
4      frequency;

5              a second conductive radiation element that is formed in the  
6      sheet metal conductor and resonates at the predetermined resonance  
7      frequency;

8              a ground that is connected through a conductive ground  
9      connector with said second conductive radiation element;  
10          wherein said ground is placed such that said ground is not  
11      opposed to said first and second conductive radiation elements.

1        2. The mobile phone antenna according to claim 1, further  
2      comprising a third conductive radiation element,  
3              wherein said first conductive radiation element resonates at  
4      a first resonance frequency and said third conductive radiation  
5      element resonates at a second resonance frequency.

1        3. The mobile phone antenna according to claim 2, wherein  
2      said third conductive radiation element is disposed at right  
3      angle to a surface in which said first and second conductive  
4      radiation elements are formed.

1        4. The mobile phone antenna according to claim 2, wherein  
2      said ground includes: a first ground that is connected through  
3      said conductive ground connector with said second conductive

4 radiation element; and a second ground that is connected through  
5 a conductive inter-ground connector with said first ground, said  
6 second ground being capable of rotating in the range of a  
7 predetermined angle from a position that said second ground faces  
8 in parallel said first ground; and

9       said conductive inter-ground connector is positioned under  
10 said second conductive radiation element when said second ground  
11 rotates by said predetermined angle.

1       5. The mobile phone antenna according to claim 1, wherein  
2       said second conductive radiation element includes a coupling  
3       adjuster that extends parallel to said first conductive radiation  
4       element while having a predetermined clearance with said first  
5       conductive radiation element;

6       said coupling adjuster has a length, a width and said  
7       clearance to be adjusted such that said mobile phone antenna has  
8       a predetermined resonance frequency and bandwidth.

1       6. The mobile phone antenna according to claim 5, wherein  
2       said clearance is set 2mm or less.

1       7. The mobile phone antenna according to claim 2, wherein  
2       said second conductive radiation element includes: a first  
3       coupling adjuster that extends parallel to said first conductive  
4       radiation element while having a first clearance with said first  
5       conductive radiation element; and a second coupling adjuster that  
6       extends parallel to said third radiation element while having a  
7       second clearance with said third conductive radiation element; and

8        said first and second coupling adjusters have a length, a  
9        width and said first and second clearances to be adjusted such that  
10      said mobile phone antenna has a predetermined resonance frequency  
11      and bandwidth.

1            8. The mobile phone antenna according to claim 7, wherein  
2        said first and second clearances are set 2mm or less.

1            9. A mobile phone antenna for folding type mobile phone with  
2        a pair of housings foldable, comprising:

3            a first ground that is installed in one of said pair of  
4        housings;

5            a second ground that is installed in the other of said pair  
6        of housings, said second ground being connected through a conductive  
7        inter-ground connector with said first ground;

8            first and second conductive radiation elements that are  
9        disposed at a position where said first and second conductive  
10      radiation elements are not opposed to said first and second ground,  
11      said first and second conductive radiation element resonating at  
12      a predetermined resonance frequency; and

13        a conductive ground connector that electrically connects said  
14      first ground with said second conductive radiation element.